SummitNet News

Phase II Nears Completion

SummitNet, the State and Universities of Montana Multi-Protocol Network, continues its rapid expansion across the state. According to Carl Hotvedt, Chief of the Telecommunications Operations Bureau, Phase II, connection of property appraisal offices, is almost complete. In

SUMMITNET

addition, the last 15 county seats will be connected later this summer.

Further enhancements to the network are being planned as well. ISD will remove older 37XX controllers in Great Falls, Kalispell and Missoula. The two 3745 controllers in Helena and Billings will be retained to centrally manage SNA gateway traffic. Fewer sites will have individual gateways, making their support more efficient.

Phase III of the SummitNet expansion plans will concentrate on connecting Public Health and

Human Services public assistance offices and conversion of any remaining multi-drop analog circuits.

ISD continues to work with CISCO Systems on upgrades to their PIX (Private Internet Exchange) devices. They are scheduled for deployment in late spring, after the 1997 Legislature ends. The PIX will assign IP (Internet protocol) addresses within the state network, eliminating our ongoing problem with duplicate addresses.

INSIDE

The ISD Customer Support Center (Help Desk) is also working to consolidate and improve its network monitoring and trouble reporting systems.

For more information on SummitNet, please contact Carl Hotvedt of the Telecommunications Operations Bureau at 444-1780, ZIP!, or E-Mail at chotvedt@mt.gov.

Free Year-2000 Seminar Offered

Information Services Division (ISD) is sponsoring a FREE Year 2000 seminar on March 10-11 (Monday, Tuesday) at Helena's Colonial Inn. The 1½-day seminar is open to State agencies, as well as county and municipal governments. Carl Gehr and Marilyn Frankel of the Edge Information Group will be the seminar presenters.

PLEASE NOTE: This seminar will be technical in nature and is geared toward those individuals who will be managing, or will be otherwise heavily involved in, Year 2000 projects. This presentation is based on the assumption that attendees have an awareness of the nature and scope of the Year 2000 problem.

Day One
This all-day program will survey the phases of a Year 2000 project, from inventory through implementation. Specific time slots will be assigned to each topic area to allow individuals to selectively attend sessions.

Day Two
This half-day program will deal specifically with Year 2000 automated software tools. This session is specifically oriented toward State agencies, as its sole emphasis will be on tools in an IBM MVS mainframe environment. Some general discussion of automated tools, and those that may have value in a non-IBM mainframe environment, will be included during the first day's program.

Since seminar seating is limited, *reservations are required*. For more information, or to make reservations, contact Dan Sidor, of the Year 2000 Project Team and ISD's Policy, Development & Customer Relations Bureau, at 444-2029, ZIP!, or E-Mail at dsidor@mt.gov.

Year 2000 Repair Strategy

Data Expansion or Logic Approach
If the decision has been made to repair an existing system to make it Year 2000 compliant, there are several alternatives for accomplishing the repair work. The two most common are the data expansion approach and the program logic, or "windowing," approach.

Data Expansion Approach
Data expansion refers to the physical expansion of date fields to include a four-digit year, as well as making the necessary program changes to reflect the expanded fields.

Enterprise Wide News

The main advantage of this option is that it completely resolves the Year 2000 date issue and is, therefore, the more desirable option from an overall manageability and long-term maintenance perspective.

The disadvantages are that:

- It's the more costly and time-consuming of the two approaches.
- Bridging is required.
- Testing is more complicated.
- Storage costs will be higher.

As file layouts are expanded, a conversion program will be required to append the correct century to each date field.

In time constrained circumstances, the organization might consider a variation on full data expansion. One alternative would be to expand the date fields to four digits in all file definitions, but leave the end-user interface points, such as screen layouts and reports, with two-digit date representations. This is particularly viable in environments with knowledgeable end-users where the likelihood of misinterpretation of the year "00" is small. Another option would be to not expand those date references where the date is simply moved to either another file or a report.

An alternative to full data expansion is to use the existing two-digit field but change the field definition to either a packed decimal or binary format. This would allow the field to contain the century without changing the file size. This appears to be an ideal solution because it involves minimum disruption and effort. However, since this method brings into play some of the biggest drawbacks of the data expansion and logic approaches, it should be thoroughly examined before using.

Logic Approach

In the logic approach, changes are made to the program and not the data. File formats containing two digit years remain unchanged. The typical logic approach utilizes "windowing," wherein logic is added to the program that assigns a century based on the two-digit value of the year. These windows typically encompass a 100-year time period and may be either fixed (the more common usage) or sliding. An example of fixed date windowing is:

If year < 25, add 2000 else If year > or = 25, add 1900.

In a sliding window, the range of years that comprise the window change as the current year advances. For example, the window logic might interpret dates from a starting point of 75 years past to a date 25 years ahead. Therefore, in 1997, the window logic would result in the following date interpretation:

If year < 22, add 2000 else If year > or = 22, add 1900.

In 1998, the same program logic would result in the following interpretation:

If year < 23, add 2000 else If year > or = 23, add 1900.

The advantage of the sliding window is that the program logic will be valid for a longer time period. The risk in this method is that the same data could be interpreted differently as time progresses. In the 1997 example, a person with a birth date of 1922 will have the correct age calculated. But in 1998, his birth date would be interpreted as 2022, resulting in an incorrect age calculation.

A windowing approach does not work well in situations where a date spans more than 100 years. Dates of birth are a good example. Without a corroborative check of other data (such as the occurrence of retirement income), it isn't possible to interpret a birth date of "03" as either 1903 or 2003.

The advantages of the logic approach are that: it's less expensive; implementation and testing are less complicated; and no data is changed.

The disadvantages are that:

- Some dates, such as birth dates, are ambiguous and don't lend themselves to straightforward interpretation.
- Some usages of dates, such as in sorts or file keys, may make this option inappropriate.
- This is not a permanent solution and will require future maintenance.
- CPU and wall clock time increase for the application, and this may result in unacceptable impacts on response times and processing costs.

Other Considerations

For applications with forward-calculating logic, the problem ceases at the turn of the century. In such instances, there needs to be a post-2000 maintenance effort to remove the pre-2000 compliance logic. For those applications that only look back, the problem does not begin until the millennium changeover. Forward-only applications are better candidates for a logic-only approach, while those that look either back or both directions are better candidates for a data expansion approach.

A data expansion approach is likely to be preferable when maintaining current application performance levels is a requirement.

For data files that are subject to numerous ad hoc queries, or other types of "uncontrolled" data access, the data expansion approach is preferable; otherwise, logic filters must be applied to all data reads and updates.

A logic approach may be appropriate if: it's anticipated that the application will be retired or rewritten within two years of being made compliant; the degree of sharing between databases makes creation of bridges/filters/fire walls unmanageable; the number of databases to expand is greater than available time allows; or there are time and/or money resource constraints.

In the final analysis, it is unlikely that a single approach will be feasible across all systems. The challenge will be in managing compatibility across the use of different solutions.

For more information, contact Dan Sidor, of the Year 2000 Project Team and ISD's Policy, Development & Customer Relations Bureau, at 444-2029, ZIP!, or E-Mail at dsidor@mt.gov.

Disaster Recovery Report

Recently, the television program DATELINE televised a special about the winter storms that pounded the West Coast during the 1996 Christmas

holidays. For those who missed the program, ISD has a copy of the video available for viewing. By providing detailed information on recent disasters very close to home, this video will open the eyes of even the toughest disaster recovery skeptic.

May 1997 Drill

February's *News & Views* presented information on the scope of the upcoming May and November drills. Due to agency requests, the May drill will focus on network testing. During that drill, ISD will be working with Weyerhaeuser Recovery Services (Weyerhaeuser) on the deployment of basic rate ISDN functionality to major requests of the routed network. The drill will test the effectiveness of the disaster recovery process in identifying routing table changes, protocol issues, and router inter-operability. Throughout this process, a boiler-plate WAN/LAN plan will be developed. In addition, Department of Revenue may test their AS/400 platform.

November Drill Planned

The November drill will consist of System A (ES9000-832) recovery, including the restoration of MVS, CICS, DASD, IDMS/VSAM databases, NCP, VTAM, and connectivity; full-blown network testing of the SNA, SummitNet, and selected agency application systems; and agency AS/400 recovery.

Agencies . . . [are] invited to participate in plan development and semi-annual drill testing.

Future Disaster Preparation

Future scenarios for disaster preparation and testing will escalate in severity and will include the loss of: the mainframe, the Mitchell building, Helena, another core city (such as Missoula or Billings), and individual remote offices. Backup and recovery efforts will include short- and long-term requirements. Agencies have been, and will continue to be, invited to participate in plan development and semi-annual drill testing.

LAN/WAN Disaster Planning

In early February, ISD was privileged to have Dave Kusumoto from Weyerhaeuser provide expertise in LAN/WAN disaster planning. Several agency representatives participated in the LAN training session and are in the process of developing their specific disaster recovery and business continuity plans. In addition, follow-up training sessions have been scheduled for the development and maintenance of these agency plans. Thanks go out to each agency for their attention and participation in these disaster recovery planning efforts.

For those agencies who have not yet been scheduled for training in plan development, or who have not provided a disaster recovery contact person, please contact these Computing Policy & Development Section staff: Leslie Cummings at 444-2469, ZIP!, or E-Mail at lcummings@mt.gov; or Brett Boutin at 444-0565, ZIP!, or E-Mail at bboutin@mt.gov.

E-Mail RFP Update

The process to select a replacement for ZIP!Office and ZIP!Mail is underway. A decision was made to break that process into two separate requests for proposals (RFPs). The first RFP is for the selection of the actual E-Mail/groupware technology, and the second RFP is for the selection of an implementor/ deployment partner.

The schedule of events for the first RFP is:

- RFP Released 1/29/97
- Deadline for Written Clarification 2/12/97
- Deadline for Receipt of Responses 3/3/97
- Proposer Interviews 4/7 - 11/97
- Deadline for Receipt of Best and Final Offer 4/25/97
- Intent to Award 5/5/97

The second RFP, for deployment assistance, will be issued immediately after the first RFP is complete. The resulting deployment contract is expected to be awarded in September 1997. It is quite likely that the proposer selected from this RFP will be different than the one selected during the first RFP process.

The goal is to start working with the selected E-Mail/groupware technology in a test environment after the May 5, 1997 Intent-to-Award date has passed. This allows the state to gain experience with the new E-Mail software while the second RFP is on the street, and shortens the path to ultimate deployment.

If you have further questions about the E-Mail RFP process, contact Terry Kramer of End User Systems Support at 444-2556, ZIP!, or E-Mail at tkramer@mt.gov.

Enterprise Wide News

State Bulletin Board System Compliance

ISD provided a State Bulletin Board System (BBS) compance report to the Governor's Office at the end of December 1996. The report summarized, by agency, the currency and content of information, as well as compliance with legislation requiring agency use of the BBS. Montana Code Annotated (MCA) 2-17-322 states: "Agencies involved in communicating information to the public shall maintain appropriate information on the bulletin board system, including but not limited to:

(a) environmental assessments;
(b) rulemaking notices;
(c) board vacancy notices as required by 2-15-201;
(d) agency reports mandated by statute;
(e) parks reports required by 23-1-110;
(f) requests for bids or proposals; and
(g) 　public meeting notices and agendas."

Generally the report was positive as most agencies are striving to make electronic information available on the BBS; keep up the good work! For the few agencies that haven't spent much time uploading files to the BBS, it is never too late to get started.

Who are you going to call?

As you are probably aware, ISD has contracted with the Office of Public Instruction (OPI) to perform system administration and support functions for the BBS. If you are having problems accessing or using the BBS, after you've checked with your LAN administrator, call OPI for help at 444-1626 or 444-2765. Since ISD remains responsible for the overall operation of the BBS, you can still call ISD about administrative issues relating to overall BBS operation.

Increase in Usage

Specific statistics aren't available yet, but it appears that the BBS is being accessed heavily for legislative information. This follows the pattern of the last legislative session when full text of bills was first placed on the BBS.

If you have questions regarding BBS compliance or administrative issues, please contact Kyle Wynn of End User Systems Support at 444-2859, ZIP!, or E-Mail at kwynn@mt.gov.

CICS Upgrade to Version 4.1

We are in the process of migrating from CICS 2.1.2 to CICS 4.1. This change is necessary primarily because IBM has dropped support of CICS 2.1.2 as of December 31, 1996. We are skipping CICS 3.x to take advantage of the newer features of CICS 4.1 and to avoid migrating twice in a short time period. The migration has been quietly in progress for more than six months. We have had to overcome many obstacles presented by the wide variety of software products that comprise our mainframe CICS environment.

Some of the benefits of Version 4.1 are improved reliability through storage protection facilities, year 2000 compliance, support for the new Language Environment/MVS compilers, and enhancements in functionality and performance. Specific enhancements include the following:

- Front End Programming Interface — allows a CICS program to act as a terminal emulator to gain screen-level access to other CICS or IDMS applications.
- Distributed Program Link — allows a CICS program to link to a program executing in another CICS region.
- Dynamic Transaction Routing — allows the use of multiple application owning regions, by not tying a transaction to a specific CICS region.
- Enhanced Security Interface — improved interfaces with the host security system.
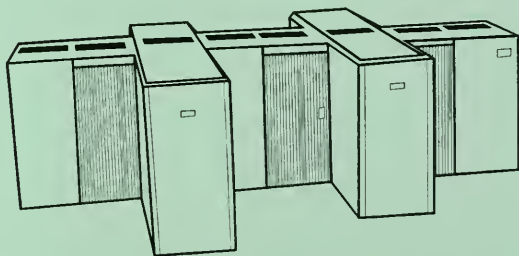
- Shared Data Tables — allows VSAM data to be loaded into memory. Greatly improves I/O (input/output) times.
- External CICS Interface — allows a non-CICS program to utilize CICS functions and services.
- Web Browser Interface — allows the accessing of CICS data from a web browser such as Netscape.

The major impact of CICS 4.1 on our applications is that old macro-level programs are no longer supported. Additionally, all applications must be retested to verify compatablity with the new version. We are in the process of identifying those macro-level programs that are still in use so that they can be rewritten. A new CICS region has been set up for testing and can be accessed from TESTCICS with prior coordination.

CICS 4.1 is currently installed and running in the following CICS applications: the DISOSS E-Mail interface, the data owning regions for VSAM file accesses, and the Department of Labor and Industry (DLI) Job Service applications. The CICS terminal owning region, CICSPROD, will be converted next. The remainder of the application regions will be converted as testing progresses, with a scheduled completion by June 30, 1997.

If you have any questions regarding the new release of CICS, contact the following Systems Development Support staff: Don Grinsell at 444-2983, ZIP!, or E-Mail at dgrinsell@mt.gov; or Ken Boyer at 444-2908, ZIP!, or E-Mail at kboyer@mt.gov.

Mid-Tier Computing Needs? Explore ISD's Services

Already a handful of agencies are enjoying mid-tier services offered by ISD's Computing Operations Bureau. Intended to function primarily as a shared-use Oracle database server, the following configuration is available for production use:

- a Digital Equipment Corporation's DEC Alpha 4100, with a 300 MHz CPU,
- one (1) Gigabyte RAM,
- a one (1) Megabyte cache,
- 50 Gigabytes DASD, and
- two (2) magnetic-cartridge tape drives.

Subscribers enjoy these wide-ranging services:

Operations
- 24 hour, seven (7) day per week, operational support.
- Nightly backup of all DASD to off-site storage. Also, hot-site disaster recovery capability is expected to be available beginning July 1, 1997.

Environmentals
- Fully conditioned UPS (uninterruptible power supply) electrical system.
- Automatic fire detection and suppression.
- A secure, locked, and continually manned facility.

Technical Environment and Support
- Management of the operating system software portfolio.
- Oracle database software technical support.
- Centralized security administration.

More Services!
- Configuration planning.
- Performance monitoring and tuning.
- System hardware capacity and utilization planning.

Network News

• Problem/change reporting system and resolution meetings.

Currently, 11 production applications are processed on this platform:

Agency	Application
Information Services Division (ISD)	Telephone Switch Routing Tracking system
ISD	Contract Management system
ISD	E-Mail Tracking system (ZIP!Office)
ISD	Help Desk Support Referral system
ISD	Year 2000 Date Convert data base
Dept. of Administration	State Credit Card processing system
Legislative Branch	Legislative Integrated Budget system
Office of Budget and Program Planning	OBPP Audit system
Dept. of Revenue	Department of Revenue Corporate Tax system

There are two additional Legislative MIBS (Montana Integrated Budget System) instances available on the system for SQL (Structured Query Language) and decision support operations.

Interested in subscribing? For general information about ISD's mid-tier services, contact Paul Rylander of the Computing Operations Bureau at 444-2557, ZIP!, or E-Mail at prylander@mt.gov. Or direct your Oracle questions to Gary Poepping of Systems Development Support at 444-2811, ZIP!, or E-Mail at gpoepping@mt.gov.

Year 2000 Mainframe Software Product

ISD Evaluates Date-testing Software

ISD is currently evaluating a mainframe software product that allows date testing. This software allows users, on a job-by-job basis, to specify the system date that is given to a requesting application. This is invaluable in agency Year 2000 projects because it allows testing of applications in the year

2000 and beyond, without affecting other applications and without the need for any operator intervention. ISD is in the process of installing and testing the software. Information on how to use the product, and when it will be available, will be published in a future issue of *News & Views*.

For more information about Year 2000 issues, contact Dan Sidor, of the Year 2000 Project Team and ISD's Policy, Development & Customer Relations Bureau, at 444-2029, ZIP!, or E-Mail at dsidor@mt.gov.

ITMG February Meeting

The Information Technology Managers Group met on February 5, 1997.

Meeting Highlights

Gary Wulf, of Department of Commerce and an ITMG representative on the E-Mail RFP team, gave a status report on the RFP team's progress. The RFP has been issued and is available in several electronic locations: the State BBS (METNET), under the Purchasing Conference; the World Wide Web, under the Purchasing and Procurement Division's site (http://www.mt.gov/doa/ppd); or on the ISD Value Added Server (doa_vas_001/guest/itmginfo/os/email1.wpd). See the article, "E-Mail RFP Update," on page 5 of this issue.

In other business, ISD staff gave several updates for ongoing projects including: SummitNet, the CICS upgrade, mid-tier services, BBS compliance and

forthcoming RFPs. For more information on these subjects, please refer to the related articles in this issue.

Next Meeting

The next meeting of ITMG is scheduled for March 5, 1997 at 8:30 am in Room C209 of the Cogswell Building. Complete minutes of the meeting are available on the state BBS and the ISD Value Added Server (VAS) at doa_vas_001\sys:guest\itmginfo\minute97 or from Amanda Christen of ISD at 444-2700, ZIP! or E-Mail at achristen@mt.gov.

Correction Regarding Last Issue's Article — "Replacement for ISDINFO"

In the February issue of *News & Views*, the article "Replacement for ISDINFO" contains a serious error. About halfway down the column, item 2) reads "Choose function 1 from the QUICKREF Main Menu." It should read: "Choose function U from the QUICKREF Main Menu."

The same error is reflected in the second half of paragraph two. That text refers to choice 1 on the QUICKREF Main Menu which has the description "**Independent Software Vendor Product Group 1.**" It should refer to choice U whose description reads "**ISD Mainframe Custom Additions & Quickref User Guide.**" Note that the Quickref User Guide is not actually an ISD addition, but rather a form of "Help" provided with Quickref itself. Sorry for any confusion this may have caused.

For more information, contact Buzzy Buswell of the Computing Operations Bureau at 444-2881, ZIP!, or E-Mail at bbuswell@mt.gov.

Tech Talk

METNET and BBS Tips

About Résumés

We encourage METNET and State BBS users to create résumés. Here are a few tips on how to do it:

As a user of the FirstClass software, you can have a résumé on this system which other users can view by double clicking on your name whenever they see it in a message or directory listing. Résumés are used to provide other users with information about yourself.

To create or edit your résumé, click on the Edit menu and select Résumé. If this is the first time you've used the résumé feature, your file will be empty. Type in any information you want others to know about yourself. There are two empty fields in the upper panel of the résumé file: the left box is for your picture, and you can use edit/copy/paste to insert a picture there; on the right is a large text box into which you can type your name and title. Closing the résumé will save your changes.

To view the résumé of someone who has sent a message, open their message, and double click on the "From" name. The person's résumé will be displayed. You can also display the résumé of anyone in the To: or Copies: list in the same way.

For more information on using the State BBS, contact Janet Andrew of OPI (Office of Public Instruction) at 444-2765, ZIP!, METNET, or E-Mail at jandrew@metnet.mt.gov.

ZIP!Office — Internet E-Mail Error Messages

Sending Internet E-Mail out of ZIP!Office is a great tool; however, it can be frustrating when an error message comes back saying that the mail did not go through. There are several reasons why mail is rejected. One common reason involves a typographic error in the Internet Address itself. We have tools available that can determine if the Host name (the information that appears to the right-hand side of the "@" sign) is valid.

Other errors occur when users send attachments from ZIP!Office to the Internet. Our SMTP (Simple Mail Transfer Protocol) gateway sends attachments in MIME format (which is the standard mail transfer protocol). If the Host you are sending to does not use MIME, you will receive an error message.

For us to assist in determining what the problem may be, it is extremely helpful for us to see the actual error message you received. Therefore, when you receive an Internet E-Mail error message, click on the "Forward to other people" icon and select "ZIP!Office, Resources" as the recipient. Click on the "Send" icon. The ZIP!Office intray will be checked daily for forwarded Internet E-Mail error messages. We will investigate your problem and contact you.

If you have further questions about Internet E-Mail error messages, contact Sue Skuletich of End User Systems Support at 444-1392, ZIP!, or E-Mail at sskuletich@mt.gov.

WordPerfect

Moving the Insertion Point in WordPerfect 6.1

Most of you probably know how to move around in your WordPerfect documents with the mouse and scroll bars. Since this can be a slow way to move within files, some users may find keyboard shortcuts or the Go To command useful. A brief description of each follows.

Moving Keyboard Shortcuts

The WordPerfect directional keys are Home, End, Page Up, Page Down, up arrow, down arrow, left arrow, and right arrow. As you can see in Table 1, you can use these keys alone, or in combination with other control keys (such as the Alt and Ctrl keys), to move quickly and easily throughout the document. When you move through the document by using the keyboard directional keys, the insertion point moves too.

Note: Table 1 is based on the assumption that you are using the default WordPerfect for Windows 6.1 keyboard.

Tech Talk

Movement	Key
One character left	←
One character right	→
One word left	Ctrl ←
One word right	Ctrl →
One line up	↑
One line down	↓
Beginning of the preceding paragraph	Ctrl ↑
Beginning of the following paragraph	Ctrl ↓
Beginning of the current line (after codes)	Home
Beginning of the current line (before codes)	Home Home
End of the current line	End
Top of the editing screen	PgUp
Bottom of the editing screen	PgDn
First line of preceding page	Alt PgUp
First line of following page	Alt PgDn
Top of the document	Ctrl Home
Bottom of the document	Ctrl End

Table 1: Moving the Insertion Point with Keystrokes

Moving the Insertion Point with Go To

WordPerfect's Go To command enables you to quickly move to a specific location in a document. You can choose Go To from the menus or from the keyboard.

To use the Go To feature, follow these steps:

1) Choose Edit, Go To; or press Ctrl G. The Go To dialog box appears (see Figure 1). This dialog box gives you options to move the insertion point to a specific position, page number, bookmark, table, or cell/range.
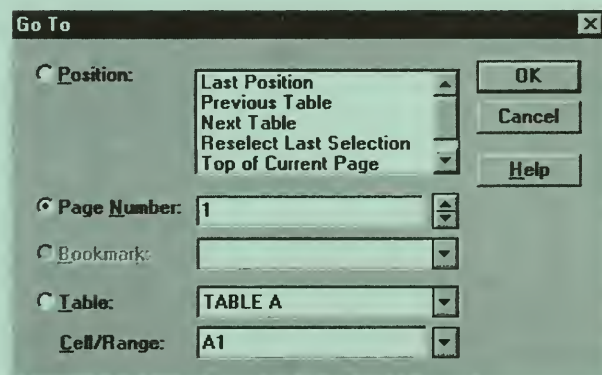
Figure 1: Go To dialog box in WordPerfect 6.1

2) Move the insertion point to the desired location by choosing from the following options:

Position - Last Position. Returns the insertion point to its position before the last major move.

Position - Previous Table. Moves to the top of the table prior to the current location of the insertion point.

Position - Next Table. Moves to the top of the table following the current location of the insertion point.

Position - Top of Current Page. Moves to the top of the current page.

Position - Bottom of Current Page. Moves to the bottom of the current page.

Page Number (this is the option WordPerfect offers as the default). Moves to a specific page number in the document. Type the desired page number, or use the up and down arrows to scroll the page number.

If you have highlighted selected text in your document, several other options are listed in the Position list box. These additional options are:

Position - Beginning of Selection. Moves the insertion point to the beginning of the selected text. The text is deselected.

Position - End of Selection. Moves the insertion point to the end of the selected text. The text is deselected.

Position - Reselect Text. This options reselects the text that was selected when either the Beginning of Selection or End of Selection options is used.

After you have selected and then deselected a portion of your document, the following additional option is available:

Position - Reselect Last Selection. Re-highlights the portion of a document that was last selected.

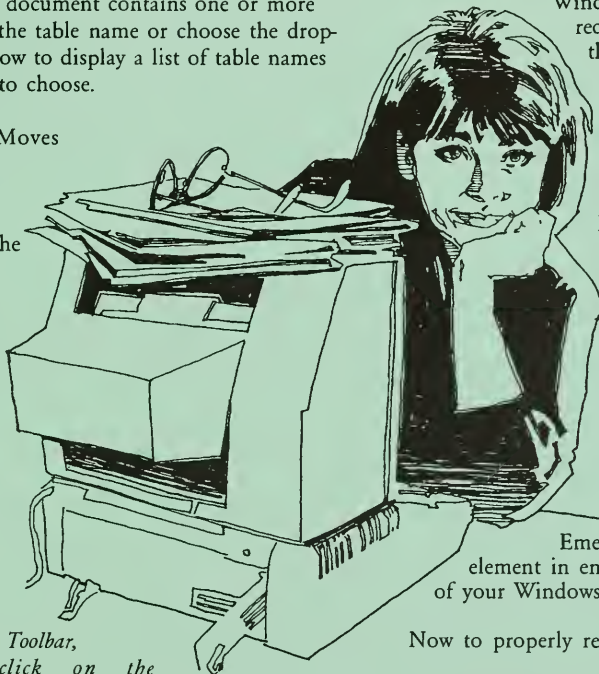In certain situations, other actions are also available in the Go To dialog box:

Bookmark. Moves to the location of the selected bookmark. This choice is not available if the document has no bookmarks set. Type the bookmark name or choose the drop-down list arrow to display a list of bookmark names from which to choose.

Table. Moves to the selected table. This choice is available if a document contains one or more tables. Type the table name or choose the drop-down list arrow to display a list of table names from which to choose.

Cell/Range. Moves to the cell or range within the selected table. Type the cell or range name or choose the drop-down list arrow to display a list of names from which to choose.

Tip: You can add a Go To button to the Power Bar or Toolbar, or double-click on the Combined Position box (the one that displays the page number, line, and position) on the status bar to display the Go To dialog box.

If you have any questions about these features, please contact Irvin Vavruska of End User Systems Support at 444-6870, ZIP!, or E-Mail at ivavruska@mt.gov.

CorelDRAW! 5.0 — Removal Under Windows 95

The following procedures outline the proper removal of CorelDRAW! 5.0 from a Windows 95 workstation. Please be aware that before manually uninstalling any 16-bit application from Windows 95, it is strongly recommended that you backup the system.dat and user.dat files. These files are hidden files located in your Windows 95 subdirectory. You should also make backups of your win.ini and system.ini files.

In addition, it is a good idea to have a current Emergency Startup Disk for Windows 95. When adding hardware or software, one should consider updating the startup disk. This is easily accomplished by clicking on Start, Settings, and then Control Panel. Within the Control Panel display, select Add/Remove Programs; click on the Startup Disk tab; and then click create. The Emergency Startup Disk is a vital element in ensuring the continued operation of your Windows 95 desktop operating system.

Now to properly remove CorelDRAW!:

1) Backup any personal or customized files that have been stored in the COREL50 directory.
2) Click on "Start Menu."
3) Select "Programs" and then "Windows Explorer."
4) Locate and delete the COREL50 directory.
5) Locate the Windows 95 directory, then find the subdirectory START MENU\PROGRAMS, and delete the COREL50 folder.
6) Exit Explorer.
7) Click on "Start Menu."
8) Select "Run," type "WIN.INI" and then press ENTER.

Tech Talk

9) Search for the [CorelGraphics5] Section and delete it.
10) Click on "File," and then "Save" the changes. Close the WIN.INI.

Proceed with extreme caution during this next section. Incorrect changes made in this section can prevent Windows from loading and may require you to reinstall your Windows 95 system. Please be sure to read all instructions thoroughly before proceeding.

1) Click on your "Start Menu."
2) Select "RUN," type "REGEDIT" and then press ENTER.
3) Double-click on "Hkey_Classes_Root" and delete the following entries (if applicable):
   Cdraw5
   Cmove5
   CorelChart5
   CorelDRAW.CorelDRAWApp.5
   CorelQuery
   Cpaint5
   CquickDraw5
   Cshow
   Ventura Publication
4) Close the Registry Window.
5) Remove any Corel 5.0 shortcut icons that are on your desktop. To do this, click once on the icon and push your keyboard's Delete key.
6) Click, with the secondary mouse button, on your recycle bin and choose "Empty Recycle Bin."
7) Restart Windows.

Congratulations, you have successfully uninstalled CorelDRAW!

For more information, contact Jerry Kozak of End User Systems Support at 444-2907, ZIP!, or E-Mail at jkozak@mt.gov.

Lotus 1-2-3 — Search and Replace Solution for Numeric Fields

You may have noticed under Lotus 1-2-3 for Windows that using search and replace to perform a search on a numeric field yields a less than desirable result . . . it does not work. Lotus, for some unknown reason, has never addressed this feature in any of their multiple releases. Many users have come to me with this problem, and I have created a simple macro that will turn a column of numeric data into character data, which can then be searched and/or replaced.

The syntax for this macro is:

```
Change    {edit}{Home}'{D 1}
          {IF@cellpointer("TYPE")="b"}{QUIT}
          {Branch Change}
```

"Change" is the name of the macro. To use this macro, type it in exactly as it appears, using two separate columns. Move to the cell where the word "Change" is located, and choose RANGE NAME and type in "Change," the name for your macro. To execute this macro, move to the first entry in the column of data you wish to convert. Choose TOOLS, MACRO, RUN and click on Change. After a few seconds, the changes will be complete.

For those of you who wish to know how this macro works, here is an explanation. The word "Change," being from an ancient Celtic dialect, has been chosen to respond in this manner because of its overall significance to the 2nd daughter of the progenitor of the Lotus race. But seriously, the macro first does an Edit on the cell where the cursor is located. Then the Home command moves the cursor to the front of the data in the cell. An apostrophe is added to the data in that cell, and by moving the cursor down one line, the data is entered into the cell. The next line of the macro

checks to see if the next cell is blank. If it is blank, the macro quits, and the process is completed. If the cell is not blank, the Branch command re-executes the Change macro, and the process starts over with Edit Home, etc.

If you have any questions about this procedure, please contact Brian Divine of End User Systems Support at 444-2791, ZIP!, or E-Mail at bdivine@mt.gov.

Windows 95 Freebies — FileGrab and TrayLaunch

This month's free Windows 95 utilities come from *PC Magazine*. FileGrab gets a list of files from the Windows 95 Explorer window, letting you paste it into another application. TrayLaunch lets you launch desktop programs from Windows 95's tray. (See the right hand boc on your task bar.) But before using these, or any other Windows 95 freebies, be sure to check with your network administrator.

If you would like a copy of either FileGrab or TrayLaunch, the files are available on the ISD Value Added Server (VAS) at \guest\windows\winaddon\95addons\Filegrab and at \guest\windows\winaddon\95addons\Trayln. If you don't have access to the VAS, or have questions about it, contact Denny Knapp of End User Systems Support at 444-2072, ZIP!, or E-Mail at dknapp@mt.gov.

Dell Delivers Intel's MMX Technology

New Technology Provides Faster Performance and Richer Multimedia

Dell Computer Corporation recently introduced three new models of its OptiPlex and Dell Dimension PCs based on the new Intel Pentium processor with MMX technology. MMX is expected to improve PC performance by as much as 20 percent and provide support for richer multimedia applications.

Dell will begin shipping the MMX processor on its Dell Dimension XPS M series for small businesses and home office customers, and on the Dell OptiPlex GXi and OptiPlex Gs for corporate, government and education customers. The new models will combine the 166MHz and 200MHz versions of the new processor with features such as integrated sound and video, support for Universal Serial Bus (USB) devices, and high-speed networking solutions. Dell also plans to incorporate this new technology on its award-winning Latitude line of notebook PCs this spring.

Dell Delivers Intel's MMX Technology to its Business PCs

Dell's Dimension XPS M series include Intel's Pentium processor with MMX technology, 12-speed CD-ROM drive, high-performance sound and video, 32MB of SDRAM, 3.2GB hard drive, and color monitor. Iomega Zip drives are available as an option. For additional configurations and prices, see the State of Montana's term-contract price sheet for Dell, located on the ISD Value Added Server (VAS) at \contract.trm\pc directory, or call Scott Mangum, at Dell, at the number listed below.

Tech Talk

The OptiPlex GXi and OptiPlex Gs

The OptiPlex GXi and OptiPlex Gs, first introduced in November 1996 with Pentium processors, are among the first corporate PCs to incorporate Intel's MMX processor in a realistic and stable network solution. This combination helps provide for lower total cost of ownership and improved manageability across complex networks.

The OptiPlex Gs and GXi support the industry-standard Desktop Management Interface (DMI) and come standard with the Dell Inspector, a Dell-developed DMI browser that enables the PCs to determine and report the status of their components. The OptiPlex Gs and GXi also provide SMART technology, which reports potential EIDE hard-drive problems.

Dell OptiPlex Gs include the Pentium MMX processor, color monitor, 16MB EDO memory, a 1GB hard drive, and integrated video. An optional sound card is also available. The OptiPlex GXi models include video, sound, and 16MB of EDO ECC memory.

For more information, quotes or ordering, contact Scott Mangum of Dell at 800/ 274-7799 x66226.

IBM's PC Server 330 Offers 200MHz SMP Pentium Pro Performance

The PC Server 330 brings 200MHz Pentium Pro processor performance, and many other significant functional enhancements, to the business enterprise segment of the server market. This new high-performance symmetrical multiprocessor

(SMP) server not only scales processor performance to new levels for a server of this class, it offers an abundance of other functions to provide total system throughput, data storage, fault tolerance, security, and ease of use. All of this power has been engineered into an improved mechanical package with a 350W power supply and room for internal tape backup in combination with hot-swap drives.

The Server 330 is offered in a conventional bay model, hot-swap models, and a RAID model. It includes features such as a 200MHz Pentium Pro with a 512KB or 256KB dedicated cache; 32MB of EDO ECC memory; and an UltraSCSI F/W controller.

IBM PC Servers make network computing easier. The PC Server 330 models contain several status LEDs, an 8X-speed CD-ROM, ServerGuide 3.0, and TME 10 NetFinity to make them easier to use, set up, and manage other servers and clients on the network. These industry-standard servers have been tested with numerous IBM and non-IBM adapters and devices through the IBM PC Server Compatibility Program and are certified with popular network operating systems for both uniprocessor and SMP.

These robust 200MHz Pentium Pro servers are designed for your enterprise LAN operations. Features include:

• One 32MB ECC EDO DIMM is standard, and it is expandable to 1GB by using four 256MB DIMM options.
• An advanced bus architecture includes two 132MB/sec PCI buses with a secondary EISA bus for compatibility.
• Ten status LEDs allow the monitoring of critical functions, such as processors and Ethernet activity.
• Plenty of room is available for adding 32-bit adapters — nine slots in total, including four PCI/EISA combo slots, a single dedicated PCI, and four EISA slots.
• Flexible model offerings include a conventional bay model with nine bays; or new hot-swap bay models with 10 bays that now support internal half-high tape devices; or a hot-swap bay model with the high-performance PC ServeRAID SCSI Adapter.
• Integrated PCI SVGA video, with 1MB video memory standard (expandable to 2MB); UltraSCSI PCI controller; and a full-duplex Ethernet PCI controller to provide necessary functions without consuming valuable expansion slots.

- Three-year, on-site, limited warranty; IBM PC HelpWare® TechConnect; and PC Server Start Up Support.

The PC Server 330 processor and memory subsystems provide an excellent price-to-performance ratio for compute-intensive operations, such as an entry-to mid-range database server, or for supporting a large number of clients for file server applications.

For more information, quotes or ordering, contact Mike Price of ComputerLand of Helena at 443-3200.

The Oracle Channel (TOC)
Additional Oracle Training Available

Many thanks to the Montana Department of Transportation for sharing seats at The Oracle Channel broadcasts.

The Oracle Channel provides live technical training via satellite. Each interactive classroom has two-way voice capability and data keypads to allow each participant to ask questions, provide feedback or share experiences in real time. See the schedule below.

The Department of Transportation has a subscription to The Oracle Channel and is making seven (7) seats per broadcast available to other interested state agencies. The cost of the training is $100 per day per seat and covers the interactive keypad and course materials. Seats must be reserved by Tuesday of the week preceding the class. In the case of late reservations, a $20 fee is charged. Courses normally run from 10am to 2pm with no lunch break; however, shorter breaks are provided each hour. These courses are held in a variety of rooms at Transportation.

Transportation will register students, and ISD will bill students on their monthly computer bill.

For more information or to register, contact Ken Varnado, Department of Transportation, 444-6366, ZIP!, or E-Mail at kvarnado@mt.gov. The contact at ISD is Wendy Wheeler, 444-2856, ZIP!, or E-Mail at wwheeler@mt.gov.

Upcoming TOC Courses

Mar 4-5	Oracle Language Fundamentals*
Mar 11-12	PL/SQL coding Techniques*
Mar 13	Database Level Application Programming
Mar 18-19	Oracle7 DBA I* - class is full -
Mar 20	Database Tuning
Mar 25	Data Warehousing Fundamentals for DBAs (New)
Mar 26	Developer/2000 Tuning
Mar 27	Oracle Express Objects Products Overview
Apr 2	Oracle WebServer Overview
Apr 3	Oracle Products and Services Overview
Apr 8	Developer/2000 Product Overview (New)
Apr 9	Object Technology Overview
Apr 16-17	Oracle8 New Features (New)*
Apr 18	SmartClient GUI Fundamentals
Apr 22-23	Oracle7 DBA II*
Apr 29-30	Oracle Language Fundamentals*

*Since these are two-day classes, participants will be charged $200.

Training News

Training Calendar

This schedule has been assembled by the Helena College of Technology of the University of Montana. If you have any questions about enrollment, please call 444-6821. All classes will be held at the Helena College of Technology at 1115 N. Roberts. Please note that these costs are subject to change each July 1st.

To enroll in a class, **you must send or deadbead an enrollment application** to the State Training Center, HCT, Helena, MT 59601. If you have questions about enrollment, please call 444-6821. *Once you enroll in a class, the full fee will be charged UNLESS you cancel at least three business days before the first day of class.* HCT is also willing to schedule specific classes by request from state agencies.

	DATES	COST	LENGTH
Database Classes			
Intro. To Oracle	April 14,15	170.00	2
Prereq. Intro to Windows			
Intro. To SQL	April 21,22	170.00	2
Prereq. Intro to Oracle			
Oracle Developer 2000, Part I	March 3,4,5	255.00	3
Prereq. Intro to SQL	April 28,29,30		
PL/SQL Programming	March 17,18	170.00	2
Prereq. Oracle Developer 2000, Part I	May 5,6		
Oracle Developer 2000, Part II	March 24,25,26	255.00	3
Prereq. PL/SQL Programming	May 12,13,14		
Oracle Designer 2000	March 31 - April 11 (½ days)	425.00*	5
Lotus Approach	March 26	85.00	1
Prereq. Intro to Windows	April 14		
Inter. Lotus Approach	April 28	85.00	1
Prereq. Lotus Approach			
Data Network/Mainframe Classes			
Novell NetWare 4.1	May 12 - 16	425.00*	5
TSO/SPF	May 7	85.00	1
JCL	May 15,16	170.00	2
ADS/O	May 21,22,23	255.00	3
Microcomputer Classes			
Introduction to Windows	March 6	85.00	1
	April 2,3 (1:00 - 4:30)		
	May 1		
Windows 95 Conv.	March 21 am	42.50	1/2
Prereq. familiar with Windows	April 16 am		
Windows 95	March 5	85.00	1
	April 9		
	May 7		
ZIP!Office	March 7 am	Free	1/3
Prereq. Intro to Windows	April 10 pm		
	May 29 am		
Intro. to Internet	March 7 pm	42.50	1/2
Prereq. Intro to Windows	April 1 pm		
Internet	April 17,18	170.00	2
Prereq. Intro to Windows			
HTML	March 19,20	170.00	2
	April 29,30		
WordPerfect 6.1 for Windows	April 23,24	170.00	2
Prereq. Intro to Windows			
WordPerfect 6.1 Conv.Windows	March 18	85.00	1
Prereq. Intro to Windows	May 8		
Desktop Publishing W/ WP 6.1	March 19,20	63.75	1 ½
Prereq. WP 6.1 for Windows			
WP 6.1 Tables & Merge	April 23 am	42.50	1/2
Prereq. WP 6.1 Conv			
Lotus for Windows	April 10,11	170.00	2
Prereq. Intro to Windows			
Lotus Conv. for Windows	March 27	85.00	1
Prereq. Intro to Windows	May 28		

Prerequisites may be met with consent of Instructor.   *Plus Materials

(margin text, vertical: Training News)

ISD Class Enrollment Application

**COMPLETE THIS APPLICATION <u>IN FULL</u> AND RETURN
IT <u>AT LEAST ONE WEEK PRIOR</u> TO THE FIRST DAY OF CLASS**

COURSE DATA

Course Request:_____

Date Offered: _____

STUDENT DATA

Name:_____

Soc. Sec. Number (for P/P/P):_____

Agency & Division:_____

Mailing Address:_____

_____

Phone:_____

How have you met the required prerequisites for this course? Explain, giving the class(s) taken, tutorial completed, and/or experience.

_____
_____
_____

BILLING INFORMATION/AUTHORIZATION <u>MANDATORY</u>

User ID: _ _ _ _ _ _   Agency#: _ _ _ _

Authorized Signature: _____

**FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS
CANCELLATION IS MADE THREE BUSINESS DAYS BEFORE
THE START DATE OF THE CLASS.**

DEADHEAD COMPLETED FORM TO:
COMPUTER TRAINING CENTER
HELENA COLLEGE OF TECHNOLOGY
OF THE UNIVERSITY OF MONTANA
PHONE 444-6800 FAX 444-6892

DeadHead *BACK*

**Department of Admin
Information Services
Division**

FAX *BACK*

**Information
Services Division
406/444-2701**

MAIL *BACK*

**Department of Admin
Information Services Division
PO Box 200113
Mitchell Building, Rm 229
Helena, MT 59620-0113**

SURF *BACK*

via Internet

ZIP! *BACK*

via
ZIP!Mail,
ZIP!Office,
TAO

Editor's Notes

Published By...
ISD *News & Views* is published monthly by the Information Services Division (ISD), Department of Administration, Room 229, Mitchell Building, Helena, MT 59620, 406/444-2700, FAX 406/444-2701.

This newsletter is dedicated to educating and informing the reader with pertinent State technology news. Materials may be reproduced without permission. Alternative accessible formats of this document will be provided upon request.

Editorial Submissions...
To submit an article to ISD *News & Views* for publication, please send it to Trapper Badovinac, preferably via ZIP!. Please have your article in by the 8th of the month for inclusion in the following month's newsletter.

ISD Customer Support Center...
Have a problem (opportunity)? Do you need ISD assistance for any of your information processing requirements? Then contact the ISD Customer Support Center (444-2000), which is our central point of contact.

Subscription Services...
ISD *News & Views* is a free publication. If your name or address is incorrect, please send your current mailing label along with any corrections to Trapper Badovinac. If you would like to be added to our mailing list, let us know your name, agency, division/bureau, phone, address, city, state, zipcode, and whether you would like your newsletter to be distributed via ISD Box #, Deadhead, or Mail. ISD *News & Views* is also available electronically via ZIP!/ZIP!Office or VAX E-Mail. Current and back issues are located on the State of Montana Electronic Bulletin Board System (444-5648 local & out-of-state, or 800/962-1729 toll free in Montana) and on ISD's Value Added Server (\GUEST\N&V).

Distribution Notes...
1200 copies of this public document were printed at a cost of $360. Distribution costs are $18.25. 120 copies of this document were distributed electronically at no cost.

Editor
Trapper Badovinac (444-4917), ZIP! or E-Mail at tbadovinac@mt.gov.

6127

**Department of Administration
Information Services Division
Mitchell Building, Room 229
P.O. Box 200113
Helena, MT 59620-0113**

Is Your Address Correct?

If not, see "Subscription Services..." above